

REMARKS

The drawings have been amended in response to the objections to the drawings in paragraph 1 of the Office Action. Reconsideration and withdrawal of the objection is respectfully requested.

Claim 10 has been amended in accordance with the Examiner's suggestions to correct grammatical mistakes in response to the objection in paragraph 2 of the Office Action, and to further correct a typographical error. Reconsideration and withdrawal of the objection is respectfully requested. Claim 25 has been amended to correct for grammatical mistakes. This amendment is not being made for patentability purposes.

Claims 1-46 are pending and at issue in the application with claims 1 and 25 being independent claims. Claims 10 and 25 have been amended. Claim 46 has been added. As a result, 2 independent claims remain in the application as previously paid for, and 46 total claims now exist in the application as compared to the 45 total claims previously paid for. A check in the amount of \$18.00 has been enclosed to cover the fee for consideration of the additional claim. However, the Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 13-2855. Reconsideration and withdrawal of the rejections in view of the remarks below is respectfully requested.

Applicants respectfully traverse the rejections of claims 1-5, 11-18, 23-37 and 43-45 as anticipated by Meyer (U.S. Patent No. 5,515,266). Applicants further traverse the rejections of claims 6-10, 19, 38 and 42 as obvious over Meyer in view of Yamashita et al. (U.S. Patent No. 5,873,009). Applicants additionally traverse the rejections of claims 20-22 and 39-41 as obvious over Meyer in view of Yamashita et al., and further in view of logical reasoning.

Each of claims 1-46 recites a system or method for automatically taking corrective measures within a process plant that automatically generates an order in response to a

detected problem with a device. The recited order relates to taking one or more corrective measures to solve the problem.

Meyer does not disclose or suggest automatically generating an order to take a corrective measure in response to a detected problem, as recited by claims 1-46. Instead, Meyer discloses a system that diagnoses and analyzes machine operation data, and that provides information for planning necessary maintenance work (e.g., malfunction alert and cause) and for maintenance support purposes (e.g., repair instructions, spare parts availability, preset service times, etc.). (Col. 9, ll. 31-43). The Meyer system includes a diagnosis module (26) to diagnose machine malfunctions and an analysis module (28) to determine the maintenance needs of the machine. (Col. 2, ll. 15-30; col. 6, ll. 9-28). The Meyer system and method further includes a file (40) containing repair-support functions (e.g., repair instructions, spare parts availability and management, preset times for corresponding services, etc.). (Col. 7, ll. 1-8; col. 8, ll. 28-38). The modules (26, 28) and file (40) may be incorporated in, or accessed by, a process control computer (340) connected to a network (350), which may call a maintenance person to a malfunctioning machine. (Col. 8, ll. 50-67). Although the system and method of Meyer may generate information for planning and supporting maintenance work, the system and method of Meyer does not include the automatic generation of an order in response to the detected malfunction. The Office action appears to misinterpret the operation of the Meyer system and method in this regard.

In particular, the generation of information by the system and method of Meyer in response to a detected machine malfunction does not include the automatic generation of an order as recited by claims 1-46. Although the system and method of Meyer generates information to identify a malfunction and to identify maintenance needs of the malfunctioning machine, the diagnosis module (26) determines if a malfunction exists, and the analysis module (28) determines which machine, or component thereof, requires maintenance. (Col. 6, ll. 9-28). Neither the diagnosis module (26) nor the analysis module (28) further generate an order relating to the corrective measures needed to solve the problem as recited by claims 1-46, such as ordering parts or creating a work order for maintenance personnel.

Further, the file (40) provided by the system and method of Meyer contains repair support functions to allow maintenance personnel to plan and execute the necessary

maintenance (Col. 7, ll. 1-8), but the file (40) neither contains nor automatically generates an order in response to the detected malfunction. For example, the file (40) of Meyer includes spare parts availability and management information which may be provided to the maintenance personnel, but does not perform the automatic generation of an order for those parts. As a further example, the file (40) includes preset times for corresponding service, but there is no indication in Meyer that these preset times are a result of the automatic generation of a work order. Instead, the fact that the times are preset indicates that the times are established prior to the detection of the malfunction, and therefore are not automatically generated in response to the malfunction. Additionally, the file (40) itself is a preexisting file, and, although made available to maintenance personnel, is not generated in response to the detected malfunction and does not constitute an order. Therefore, although the information contained in the file (40) may be used for the planning and execution of corrective measures, the information is unrelated to the automatic generation of an order relating to corrective measures in response to a detected problem, as recited by claims 1-46.

Still further, the call to a maintenance person by the process control computer (340) is not an order, such as a work order, related to corrective measures to solve the problem as recited by claims 1-46. Although a maintenance person may be called to a malfunctioning machine by the process control computer (340) via a calling system (Col. 8, ll. 50-67), the call merely alerts an appropriate maintenance person to the malfunctioning machine. Once at the malfunctioning machine, the maintenance person is still tasked with the responsibility of determining the nature of the malfunction (e.g., which component or machine device is malfunctioning) and of determining the corrective measures required to solve the malfunction, based on the diagnostic and/or analysis data provided at the machine through an interface (592). The call itself does not relate to taking corrective measures to solve the particular malfunction, and therefore is not an order as recited by claims 1-46.

In addition to not disclosing each and every element of claims 1-46, Meyer does not disclose or even suggest the advantages and benefits associated with these claims. In particular, the automatic generation of an order, such as for work or for parts, limits the down time of a device or helps to assure that there is little or no down time caused by the need to wait for parts, equipment or supplies to fix the problem, thereby improving efficiency. While Meyer may detect a machine malfunction and call a maintenance person to the

malfunctioning machine, the call does not relate to or include specific corrective measures to solve the detected problem. The Meyer system and method still requires the maintenance person to determine the corrective measures required to solve the problem, obtain necessary parts, etc. Instead of being able to plan prior to attending to the machine, the maintenance person will only be able to take necessary steps to correct the problem once at the malfunctioning machine. This may lead to machine down time if, for example, necessary parts were unavailable.

Because Meyer does not disclose a system or method for automatically generating an order in response to a detected problem where the order relates to one or more corrective measures to solve the problem, as recited by claims 1-46, Meyer does not anticipate any of claims 1-5, 11-18, 23, 24, 25-37 and 43-45. Still further, because Meyer does not provide or suggest any of the advantages obtained by the system or methods of claims 1-46, Meyer cannot render any of the claims obvious.

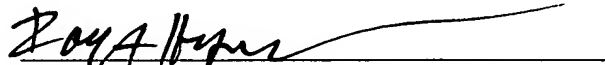
Likewise, Yamashita et al. does not disclose or suggest a system or method of automatically generating an order in response to a detected problem where the order relates to one or more corrective measures to solve the problem. Therefore, no combination of Meyer or Yamashita et al. renders any of claims 1-46 obvious.

Applicants respectfully submit that the amendments to the claims and the remarks presented herein have placed the application in condition for allowance. As such, independent claim 1 and amended independent claim 25 are believed to be in allowable form. Further, dependent claims 2-24 and 26-46, which are dependent upon the aforementioned independent claims are also submitted to be in allowable form.

For the foregoing reasons, reconsideration and withdrawal of the rejections of the claims and allowance thereof are respectfully requested. Should the examiner wish to discuss the foregoing, or any matter of form, in an effort to advance this application towards allowance, the examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

By:


Roger A. Heppermann
Registration No.: 37,641

MARSHALL, GERSTEIN & BORUN LLP
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6357
Tel.: (312) 474-6300
Fax.: (312) 474-0448

February 13, 2004